

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Improving Public Safety Communications in
the 800 MHz Band

Consolidating the 900 MHz Industrial/Land
Transportation and Business Pool Channels

)
)
)
)
)
)

WT Docket No. 02-55

To: The Commission

**REPLY COMMENTS OF
PREFERRED COMMUNICATION SYSTEMS, INC.**

Preferred Communication Systems, Inc., on behalf of itself and its subsidiary, Preferred Acquisitions, Inc. (collectively, “Preferred”), and pursuant to Section 1.419 of the Commission’s Rules, hereby submits its Reply Comments in the captioned proceeding. Preferred filed comments in this proceeding, and has reviewed the comments filed by other commenters. In addition, Preferred has reviewed a “Talking Points Memo” circulated regarding a so-called “Compromise Plan” which is apparently going to be offered to the Commission by certain other commenters as reply comments.

For the reasons set forth below, Preferred agrees with the vast majority of private commenters in opposing the so-called Nextel proposal, and in questioning whether there is an interference problem of such magnitude as to justify the proposed solutions and the new problems those “solutions” would cause. In addition, Preferred vigorously opposes the so-called “Compromise Plan”, which was drafted prior to anyone seeking any input from Preferred, which is no compromise at all but a give-away to Nextel, and which is arbitrary, capricious and unfair in the extreme.

I. The Near-Term Interference Problem Is Overstated

Preferred agrees with those commenters who noted that there is insufficient empirical data to conclude that the immediate situation at 800 MHz is so replete with harmful interference as to warrant the drastic remedy of forced relocation of incumbents that are not causing harmful interference.¹ As Preferred noted in its earlier Comments herein, it appears that the vast bulk of public safety systems are operating today in bands other than 800 MHz. Moreover, even within the 800 MHz band, a review of the APCO Project 39 Interim Report and its supplement indicates that except in the very few largest metropolitan areas, interference problems have been susceptible to resolution by implementing the *Best Practices Guide*.

The commenters have invariably noted that the single largest interference issue for public safety users at 800 MHz is one of intermodulation, a problem that is largely due to the capabilities (or lack thereof) in the installed mobile/portable base of public safety users, *i.e.*, a problem of legacy public safety systems. The only real long-term solution to such a problem is to allow that legacy infrastructure to fully depreciate, and to replace it with new equipment operating in the 700 MHz band.² Unless there is some other, overriding factor that demands near-term disruptions and dislocations for thousands of innocent licensees, this long-term solution, coupled with the short-term solution of vigorously implementing the *Best Practices Guide* and enforcing the

¹ See, e.g., Comments of American Petroleum Institute (“API”), United Telecom Council (“UTC”), Exelon Corporation, Cinergy Corporation, Private Wireless Coalition (“PWC”), National Association of Manufacturers/MRFAC (“NAM/MRFAC”), Electronic Specialties *et al.* (“Cal-AAA”), Blooston Mordkovsky *et al.* (“Blooston”).

² See, e.g., Comments of PWC, Fischer Wireless Services (“Fischer”), Coupe Communications (“Coupe”), Southern Linc, AT&T Wireless, Cingular/Alltel.

Commission's "last-in" interference protection rules, represents the only rational course of action.

Thus, the Commission has no basis for implementing a nationwide "interim" solution to the problem of harmful interference, when the near-term problem is limited and localized, and when there is a demonstrably superior long-term solution – the migration of public safety to the 700 MHz band.

II. The Interfering Entity Must Bear the Cost of a Solution

The comments are strongly in favor of adhering to the longstanding doctrine of requiring the entity causing harmful interference to remedy that interference, and of not forcing innocent licensees that did not cause interference to bear the cost and disruption of curing such interference.³ Aside from basic considerations of fairness, there is simply a dearth of precedent for requiring large-scale migration without compensation. When the Commission has forced migration in the past, it has required compensation for the innocent licensees being forced to move, whether it was the relocation of microwave incumbents from the newly-reallocated PCS spectrum or the relocation of incumbents from auctioned 800 MHz spectrum.

Indeed, to require relocation without full compensation would amount to a governmental "taking" of private property rights, in violation of the Fifth Amendment of the US Constitution. The proposal here to require relocation of 800 MHz auction-

³ See, e.g., Comments of API, Ad Hoc Wireless Alliance, Intel Corporation, NAM/MRFAC, Palomar Communications *et al.* ("Tilles Group"), Island SMR, Commercial Radio & Television Inc. ("CRT"), Harmer Communications, AVR Inc., Focus 2000 Communications, C&M Communications, Fresno Mobile Radio, Verizon Wireless, US Cellular.

winning General Category EA licensees would be a particularly egregious instance of confiscation in violation of the Fifth Amendment, if the Commission were to go forward with it.

Preferred's own situation is a case in point. Very recently, the Commission auctioned off the 800 MHz General Category spectrum, in Auction No. 34, which ended September 1, 2000. In that auction, Preferred purchased licenses in ten EAs with an aggregate population of approximately 26 million, for a total price of \$32 million. Preferred thereby acquired licenses for large *contiguous* spectrum blocks, which Preferred (and other bidders) considered fair value for the money.

Under both the Nextel proposal and the so-called "Compromise Plan", Preferred and other similarly-situated entities will be required to lose this spectrum they only very recently purchased for millions of dollars. In return, Preferred and the others (except, of course, Nextel, which will receive special favorable treatment not afforded to any other Auction #34 winner) will, under one scenario receive *non-contiguous*, much smaller blocks of the "*Lower 80*" spectrum which were recently sold in Auction #36, which ended December 5, 2000, just after the end of Auction #34. Under another scenario, Preferred and others will be forever prohibited from using the spectrum they just purchased in a digital cellular architecture to compete with Nextel!⁴

⁴ Under the latest revised draft of the so-called "Compromise Plan" that Preferred received yesterday morning, the earlier proposal to force Preferred and similarly-situated licensees onto the *Lower 80* spectrum is now replaced with a proposal to allow such EA licensees to move with Nextel onto the vacated NPSPAC spectrum *if and only if* they have first acquired 100% of the incumbent General Category licenses in their geographic market within a short time after the close of this proceeding (*i.e.*, virtually never), or else to stay in the General Category band, but be forever prohibited from constructing or operating a digital system in that band.

Under this latest revised draft, Nextel still receives a special exemption not afforded to anyone else – Nextel can trade its General Category spectrum for NPSPAC spectrum wherever Nextel holds *either* an incumbent General Category license or an EA auction license.

The “*Lower 80*” non-contiguous spectrum, where Preferred channels would be interleaved with those of myriad other licensees and difficult (if not impossible) of cobbling back into a single contiguous block within a market, would effectively preclude Preferred from ever implementing its own digital ESMR service to compete with Nextel. To understand the enormity of the disparity, one merely need look at the recent auction results.

The General Category Auction #34 sold one hundred fifty 800 MHz channels nationwide; it brought the FCC approximately \$319 million. The Lower 80 Auction #36 sold eighty 800 MHz channels nationwide; it brought the FCC approximately \$29 million. In other words, although Auction #36 sold 8/15 as much spectrum in the 800 MHz band and at approximately the same time, it brought in less than one-tenth the money. This is empirical evidence that Preferred’s General Category spectrum is worth five times as much, on a MHz-pop basis, as is the Lower 80 spectrum. Yet it is proposed to force Preferred, less than two years after it paid the FCC \$32 million, to swap the spectrum it purchased for the other spectrum (worth maybe \$6.4 million) on a channel-for-channel basis!

It is simply unconstitutional to sell licenses for \$32 million and then, less than two years later, forcibly take those licenses away in return for others worth only a small fraction. For this Commission to do so in order to ameliorate (not eliminate) supposed interference that Preferred did not cause would be arbitrary and capricious in the extreme.

This so-called Compromise Plan is not a short-term solution or long-term solution to public safety interference, but rather a spectrum grab for Nextel, with additional spectrum also going to public safety to purchase its support. It also obtains the support of

certain other industry groups who have successfully diverted the harm away from themselves and over to entities such as Preferred or Southern Linc. However, it is unfair and arbitrary in the extreme.

Basically, it proposes a trade of General Category spectrum for NPSPAC spectrum; but there is not enough NPSPAC spectrum to cover the involved General Category spectrum. The Compromise Plan deals with this obstacle as follows: a) Nextel gets to trade its General Category spectrum for NPSPAC spectrum wherever Nextel holds either incumbent or auctioned General Category spectrum. b) Whatever NPSPAC spectrum remains after Nextel gets first pick is available for other SMR licensees, but only if and to the extent that such licensees hold *both* the incumbent and auction license for a channel in a given geographic area, and only if there is still NPSPAC spectrum in that geographic area after Nextel finished taking spectrum. c) Whenever there is insufficient NPSPAC spectrum available, tough luck for whoever was behind Nextel in line. d) To the extent that any General Category spectrum cannot be traded for NPSPAC spectrum (either because a licensee held the incumbent license or the auction license, but not both, or because there was insufficient NPSPAC spectrum to go around), that General Category licensee is forever prohibited from using that spectrum in a digital cellularized architecture, no matter what its business plans may have been when it purchased the spectrum from the FCC less than two years ago.

The foregoing solution is going to satisfy the Public Safety community because it gets some amelioration of the interference it has been receiving from Nextel. It will satisfy much of the non-digital MSR and B/ILT community, because under the original proposal they were faced with forced relocation at their own expense, and now they are to

be left alone while someone else faces forced relocation. But neither of those considerations can justify forcing Preferred off its spectrum or restricting Preferred's use of its spectrum to cure interference caused by Nextel.

III. This Is a Spectrum Grab by Nextel

Under the so-called Compromise Plan, other licensees will be giving up and/or obtaining 800 MHz spectrum, but no person (other than the FCC) would obtain 700 MHz or 900 MHz spectrum. However, Nextel offers to give up certain 700 MHz and 900 MHz spectrum it owns, in return for more valuable spectrum in the 800 MHz and 1.9 GHz bands. There is much misuse of words, statements such as "Nextel Must Be Made Whole" etc., demanding that Nextel receive spectrum in return for its 700/900 MHz spectrum. But no one is asking Nextel to give up this 700/900 MHz spectrum, and Nextel's giving up of this spectrum is not even needed to implement the so-called Compromise Plan!

So why is Nextel's trade of this 700/900 MHz spectrum in return for more valuable spectrum (a windfall for Nextel) in the Compromise Plan? Because Nextel wants a windfall, and Nextel has been working since the filing of its white Paper to turn its own wrongdoing (*i.e.*, causing harmful interference) into a means of receiving a windfall while crippling its potential competitors. Having frightened the non-digital community with its original proposal, it has convinced them they have "won" something if they can just be left alone, which in turn leaves existing and potential ESMR

competitors such as Preferred and Southern Linc in the lurch. The Commission cannot and should not buy in to this artifice.

IV. Resolution Of The Interference Problem

As noted above, and in our previously filed “Comments,” we believe that enforcement of FCC’s existing regulation and a more diligent application of the Best Practices Guide will adequately address the existing interference problem. Numerous other parties share this view, as noted in their comments filed in this proceeding. However, if the FCC decides to take, what we believe is preemptive action, then the best long-term solution is to provide additional spectrum for Public Safety in the 700 MHz band, such that all Public Safety systems can migrate from the 800 MHz band. Numerous parties in this proceeding support the 700 MHz solution.

If the FCC determines that a re-banding of the 800 MHz spectrum is necessary, we have a suggested format that addresses the NPRM’s primary concerns better than any proposal we have seen. Recalling that the NPRM’s primary concerns are (1) Reducing Interference, (2) Minimal Disruption to Licensees and (3) Providing Additional Spectrum for Public Safety.

Our suggested plan (the “Preferred Proposed Plan”) focuses on the specific channels where interference is most likely occurring and then to reduce that interference with minimal disruption to licensees.

To understand the logic of Preferred’s Proposed Plan it is necessary to first be familiar with the channels that Public Safety uses and know where these channels are located in the 800 MHz band. Public Safety operates in three (3) categories of the 800

MHz, with each having distinct characteristics. These categories are (1) NPSPAC band, (2) Public Safety designated channels in the “Interleaved” section and (3) the General Category blocks.

(1) NPSPAC Band

This 3x3 MHz band (thus 6 MHz total) is located at 821-824 / 866-869 in the 800 MHz Band. It is for the exclusive use of Public Safety. It represents 6 of the 9.5 MHz of spectrum that is reserved for Public Safety. It is bordered by SMR (primarily Nextel) on one side and “Cellular” operators on the other. Based on comments filed in this proceeding (Cingular as an example) there is virtually no interference from “Cellular” operators even though they operate similar system architecture to Nextel and are immediately adjacent to the NPSPAC band.

(2) Interleaved-Public Safety

These are seventy (70) channels (which is 3.5 MHz in total) that are reserved for Public Safety in the “Interleaved” section of the 800 MHz band. The Interleaved section is from 809 / 854.7625 to 815 / 860.9825, which are channels #151 to #400. These Public Safety channels are in 5 sets of 2 adjacent channels and 10 sets of 3 adjacent channels. The majority of these “sets” are immediately adjacent to SMR spectrum (primarily Nextel). The other designations of the “Interleaved” section are 100 channels for Business/Industrial Land Transportation (B/ILT) and 80 channels for SMR (known as the “Lower 80” channels), that are primarily held by Nextel.

(3) General Category

The “General Category” is 150 channels (#1 to 150) from 806/851 to 809/854.7375 that was originally licensed on a “site basis” to SMR, B/ILT and Public

Safety. It was then overlaid with “EA” geographic licenses through FCC Auction #34 in September 2000.

In a recent FCC report to Congress (FCC Chairman M. Powell’s letter, with exhibits dated July 26, 2002 which is part of the record in this NPRM), the FCC provides detail information on various licenses in the 800 MHz band to top 100 U.S. Markets. This FCC report reflects that Public Safety is using General Category channels in most major markets; and in some markets over 50 of the 150 General Category channels are being used by Public Safety. The individual General Category channels used by Public Safety systems are, in most cases, immediately adjacent to channels operated by Nextel.

V. Preferred’s Proposed Plan

The record in this NPRM is lacking the detail as to which specific Public Safety channels are experiencing interference. Noteworthy is that the Project 39 reports (referred to in the NPRM as the primary documentation of the interference problem) do not specify the particular channels that are experiencing interference. Absent this information, we must make certain assumptions.

The primary assumption we make (based on the 800 MHz band configuration described above) is that the majority of interference with Public Safety Systems is likely to be in the General Category and the Interleaved section; and furthermore there may be very little interference in the NPSPAC band. This assumption, coupled with the fact that Nextel is virtually the sole cause of interference, leads us to the objectives of our

suggested resolution. The objectives are to remove Nextel from the Interleaved section and remove Public Safety from the General Category.

Removing Nextel from the “Interleaved” Section

The objective of removing Nextel from the problematic spectrum is accomplished by Nextel relinquishing all of its “Lower 80” EA licenses along with relinquishing its site-specific licenses for all channels in the Interleave section. We estimate that this will involve 4 to 6 MHz in each market, depending on Nextel’s exact license holdings.

Nextel will be relinquishing spectrum in the Interleaved section (as noted above), but will also gain spectrum in the General Category since Public Safety systems that move from the General Category (as discussed below) will then be available to Nextel under their General Category EA licenses. The net loss in spectrum is estimated to be 3 to 6 MHz depending on particulars for each market.

The relinquishing of the aforementioned licenses, along with Nextel’s funding of all costs associated with the relocation of Public Safety spectrum from the General Category will entitle Nextel to a nationwide 5 MHz license in the 1.9 GHz band (one of the ones they suggested receiving under their “Compromise Plan”). This is not a one-for-one exchange of spectrum, nor should it be, since Nextel is receiving more valuable “contiguous” spectrum in exchange for “non-contiguous” spectrum. Thus it is appropriate for Nextel to fund all Public Safety relocation costs.

Removing Public Safety from the “General Category”

Public Safety systems that use any of the General Category channels (1 to 150) will relocate to the vacated Nextel spectrum (as described above). The number of channels that are affected will vary from market to market, some have none others have 50 or more. Nextel will fund all costs for these Public Safety relocations.

Proposal is a Work in Progress

We first thought of our Proposed Plan after reviewing the FCC report to Congress, which was made part of the record in the proceeding on July 29, 2002. Further information on specific license position of the affected parties, cost of relocation, and relative benefits to the various parties requires further consideration

VI. Benefits of Preferred’s Proposed Plan VS Other Proposed Plans

(1) Public Safety will no longer operate in the General Category (channels 1 to 150). Public Safety will only operate in channels 151 to 400 and in the NPSPAC band. Nextel will no longer operate in the Interleaved sections (channels 151 to 400). This significantly reduces the number of places where Public Safety operates on channels adjacent to Nextel. Additionally, by having Nextel and Public Safety operate in separate segments of the 800 MHz band, (i.e. eliminating the convoluted Interleaving) technical solutions (e.g. filters, spectrum management, etc.) will more effective.

(2) Only Nextel and a limited number of Public Safety systems are involved in any relocation. No other licensees are affected. Thus, Public Safety-NPSPAC, B/ILT, traditional SMR, and EA licensees (other than Nextel) do not have to move, which

according to various comments filed in the proceeding is a savings of possibly billions of dollars.

(3) Nextel is the primary cause of Public Safety interference, thus it is appropriate for them to pay all the costs to rectify the problem. This is consistent with FCC regulations regarding the resolution of interference between licensees. Even though Nextel will incur these costs, they end up with a portion of the spectrum they were seeking under their plan.

(4) Nextel's vacating the Interleaved section will benefit B/ICT and traditional SMR operators since Nextel will be removed from the portion of spectrum where they operate, thus reducing interference with their systems.

(5) Non-Nextel EA licensees will gain access to additional channels due to Nextel's vacating all site-specific licenses below channel 401. Access to these channels can serve as a form of compensation for out-of-pocket costs and other damages incurred as a result of the NPRM as it has created a significant degree of uncertainty regarding their license positions. This is appropriate since there has been virtually no interference to Public Safety by the non-Nextel EA licensees.

(6) Public Safety will gain an estimated 2 to 4 MHz of spectrum (depending upon each market's situations). Nextel is vacating the "Lower 80" channels that will absorb the Public Safety channels relocated from the General Category, but will still have open channels that can be allocated to Public Safety.

Respectfully Submitted,

Preferred Communication Systems, Inc.
5605 N. MacArthur Blvd.
Tenth Floor
Irving, TX 75038
972-819-3756

/s/ Charles M. Austin
Charles M. Austin
President and CEO